UNITED STATES OPEN FILE REPORT 79-100 THREEMILE BUTTES QUADRANGLE DEPARTMENT OF THE INTERIOR PLATE IA OF 52 MONTANA-POWDER RIVER CO. GEOLOGICAL SURVEY 7.5 MINUTE SERIES (TOPOGRAPHIC) 4875 III SW (HOME CREEK BUTTE) OPEN-FILE REPORT This report has not been edited for conformity with U.S. Geological Survey editorial standards or stratigraphic nomenclature. SEE PLATE 1B FOR DRILL HOLE DATA. **EXPLANATION** INDEX NUMBER OF MEASURED SECTION SHOWN ON PLATE 3 OF CRO MAP—Coal section measured at point of triangle. LINE OF COMPOSITE SECTION—Showing index number of section shown on plate 3 of CRO map. Composite section is based on nearby coal bed thickness measurements. C 3 (Ck,) C 11 (Ck₂) OIL AND GAS TEST HOLE—Showing index number of hole shown on plate 3 of CRO map and drill-hole data, ● GL 3856 NR 416 OIL AND GAS TEST HOLE—Showing drill-hole data, in 27'30" C 13 (Cy) R 121 C 6 (Fe) 25 R 20 TD 200 COAL TEST HOLE—Showing index number of hole shown on plate 3 of CRO map, and drill-hole data, in feet. GI - Ground elevation NR- No record R- Rock interval C- Coal interval R?- Rock, occurrence of coal undeterminable ID-- Total depth DRILL-HOLE DATA SYMBOLS Ga-Garfield L-Local Cy-Canyon Cy₁—Upper Canyon Cy₂—Lower Canyon Fe-Ferry Ck₁—Upper Cook Ck₂—Lower Cook w-Wall EI-Elk Du-Dunning (Pawnee) O-Odell Sa,-Upper Sawyer Sa₂—Lower Sawyer Kn₁—Upper Knobloch Kn2-Lower Knobloch COAL BED SYMBOLS AND NAMES TRACE OF COAL BED OUTCROP-Dashed where approximately located; short dashed where inferred. Showing thickness of coal, or coal-rock intervals, in feet, measured at triangle. Where a thickness fraction is shown, it indicates the net coal thickness (upper number) and net partings thickness (lower number). Letters designate the name of the coal bed as listed above. Arrows point toward coal-bearing area. Trace of coal outcrop has been modified from Matson and Blumer (1973, pls. 23A, 23B, 24) and Warren (1959, pl. 19) to fit modern topographic BURNED AND CLINKERED COAL BED-Showing area of baked and fused rock (v symbol). Dotted line indicates the inferred limit of burning. 9.8 ★ STERLING MINE COAL MINE—Showing mine name and thickness of coal bed, in feet To convert feet to meters, multiply feet by 0.3048. 13 REFERENCES FOR NONINDEXED DATA POINTS Warren, W. C., 1959, Reconnaissance geology of the Birney Broadus coal field, Rosebud and Powder River Counties Montana: U. S. Geol. Survey Bull. 1072-J, p. 561-585. SCALE 1:24 000 Compiled in 1977 Base map from U.S. Geological Survey, 1966 INDEX MAP-Showing location of the Threemile Buttes quadrangle and the Northern Powder River Basin Known Recoverable Coal Resource Area (stippled), Montana 0°40′ 12 MILS

UTM GRID AND 1966 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION